

The Claims:

Claim 1. (canceled)

Claim 2. (previously presented) A method for disinfecting air with an air treatment agent, wherein said air treatment agent is introduced into the air and evaporated from a liquid phase, wherein said introduction of air treatment agent into the air comprises the following steps:

- feeding the air treatment agent from a storage chamber into a vortexing chamber through which air is flowing so that air flows through said air treatment agent;
- adjusting the supplied amount of air and the supplied amount of air treatment agent to achieve a proportion of treatment agent in the air of between 0.1 and 0.00001 ml, per m³ of air per hour; and
- introducing the mixture of air and vaporized air treatment agent into the air being treated.

Claim 3. (previously presented) The method according to claim 2, characterized in that the ratio of the amount of air supplied to the amount of air treatment agent supplied is between 45%/55% and 30%/70%.

Claim 4. (previously presented) The method according to claim 2, wherein the mixture of air and air treatment agent, before being introduced into the air, is conducted through an intermediate chamber which is separated from the vortexing chamber by a retaining disk.

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Claim 5. (previously presented) The method according to claim 2, wherein excess air treatment agent is recirculated into the storage chamber.

Claim 6. (previously presented) The method according to claim 1, wherein the proportion of air treatment agent in the air is ≤ 100 ppt.

Claim 7. (previously presented) The method according to claim 1, wherein an antimicrobial composition is used as said air treatment agent.

Claim 8. (original) The method according to claim 7, wherein said antimicrobial composition contains one or more GRAS flavoring agents or their derivatives.

Claim 9. (previously presented) A device for enriching air with an air treatment agent, especially for the disinfection of air, comprising:

a storage vessel for receiving liquid air treatment agent;

a chamber to which liquid air treatment agent is supplied; and

a means for generating a current of air in said chamber, characterized in that said chamber is designed as a vortexing chamber, so that vortexing of the liquid treatment agent is effected by the current of air which flows through the air treatment agent, and a mixture of air and vaporized air treatment agent exits from the vortexing chamber.

Claim 10. (canceled)

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Claim 11. (previously presented) The device according to claim 9 , characterized in that air inlets are provided in the bottom region of the vortexing chamber through which excess air treatment agent can drain in a direction opposite to that of the air flow.

Claim 12. (previously presented) The device according to claim 11, characterized in that said vortexing chamber and said storage chamber have a common separation wall in which said air inlets are provided.

Claim 13. (previously presented) The device according to claim 12, characterized in that said air inlets are slots.

Claim 14. (previously presented) The device according to claim 11, characterized in that said bottom region in which the air inlets are provided is funnel-shaped.

Claim 15. (previously presented) The device according to claim 10, characterized in that an intermediate chamber is provided downstream of the vortexing chamber, which intermediate chamber is separated from the vortexing chamber by a retaining disk which has transfer apertures.

Claim 16. (previously presented) The device according to claim 11, characterized in that a filter is inserted upstream of the air inlets.

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Claim 17. (previously presented) The device according to claim 10, characterized in that a pressure generating means is provided downstream of the vortexing chamber to increase the pressure of the exiting mixture of air and vaporized air treatment agent.

Claim 18. (previously presented) The device according to claim 17, characterized in that a lance is connected to said pressure generating means in order to introduce the mixture of air and vaporized air treatment agent into food packages.

Claims 19-22. (canceled)

Claim 23. (previously presented) The method according to claim 6, wherein the proportion of air treatment agent in the air is ≤ 10 ppt.

Claim 24. (previously presented) The method according to claim 2, wherein the step of adjusting the supplied amount of air and air treatment agent achieves an amount of air treatment agent in the air between 0.01 and 0.0001 ml per m³.

Claim 25. (previously presented) The device according to claim 16, wherein the filter is selected from the group consisting of particle, bacterial and moisture filters.

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Claim 26. (previously presented) A device for the disinfection of air with an air treatment agent comprising:

- (a) a storage vessel for receiving liquid air treatment agent;
- (b) a chamber to which the air treatment agent is supplied; and
- (c) a means for generating a current of air in said chamber characterized in that, in said chamber, vortexing of the liquid treatment agent is effected by the current of air which flows through the air treatment agent with a mixture of air and vaporized air treatment agent exits from the vortexing chamber in a proportion of treatment agent to air of between 0.1 and 0.000001 ml per m³ of air per hour.

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III Conclusion

It is believed that the above constitutes a complete response under 37 C.F.R. Section 1.111 and that all grounds for objection stated in the ***Notice of Non-Compliant Amendment (37 CFR 1.121)*** have been brought into compliance through Applicant's presentation of a complete listing of all claims in the application with the status-identifier for each claim. A Notice of Allowance in the next Office Action is therefore requested. The Examiner is requested to telephone the undersigned attorney if any matters that can reasonably be expected to be resolved in a telephone interview are believed to impede the allowance of United States Patent Application Number 10/019,239.

Respectfully submitted,

DANN DORFMAN HERRELL AND SKILLMAN


John S. Child, Jr.

PTO Registration No. 28,833
TELEPHONE: 215-563-4100
FACSIMILE: 215-563-4044

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CORRESPONDENCE ADDRESS:
Customer No. 000110
John S. Child, Jr., Esquire
Dann Dorfman Herrell and Skillman
1601 Market Street, Suite 2400
Philadelphia, PA 19103-2307